

C1
cont

in which some images of the sequence are intra-coded, without reference to any other image of the sequence, and the remainder are respectively coded with reference to at least one further image of the sequence;

formatting the encoded data for each image into one or a sequence of data blocks and outputting a data block stream formed of the data block or blocks from successive ones of the sequence of video images, said formatting including formatting at least one image of the sequence into a plurality of data blocks;

characterised in that the step of formatting comprises the further steps of identifying intra-coded frames and of inserting additional data blocks in said data block stream at fixed periodically repeated intervals, each of said additional blocks carrying data identifying the relative location in the data block stream of the first or only data block in the data block stream of the closest previously formatted intra-coded image frame.

C2
5/3/97

4. (AMENDED) A method as claimed in Claim 1, wherein each additional data block stores further data identifying the length of the said closest previously formatted intra-coded image frame.

5. A method as claimed in Claim 1, wherein the image frames are encoded in accordance with MPEG standards and all data blocks in the data block stream are of a common size.

C3
5/3/97

6. (TWICE AMENDED) A storage device capable of being sequential read and carrying an encoded and formatted sequence of video image frames, wherein some images of the sequence are intra-coded, without reference to any other image of the sequence, and the remainder are

CU
respectively coded with reference to at least one further image of the sequence, and the encoded data for the succession of image frames is formatted into a sequence of data blocks, with at least one data block per encoded image frame, with at least one image of the sequence formatted into a plurality of data blocks, with the stored sequence of data blocks including additional data blocks, with each such additional data block identifying the storage device storage location of the first or only data block of the closest previously formatted intra-coded image frame, wherein the said additional data blocks are provided at fixed periodically repeated intervals within the stored sequence of encoded image data blocks .

C 792
7. (AMENDED) A storage device as claimed in Claim 6, wherein the said additional data blocks are of a common size.

Sub 81
9. A storage device as claimed in Claim 8, carrying at respective separate storage locations auxiliary data associated with respective encoded image frames and each said additional data block further carries data identifying the storage device storage location of the auxiliary data associated with the particularly indicated intra-coded image frame.

10. A storage device as claimed in Claim 8, in the form of an optical disc, wherein the said additional data blocks identify the location of the first or only data block of the closest preceding intra-coded image frame in terms of the location on disc at which said data block is stored.

C 8
cont
11. (TWICE AMENDED) An encoder apparatus comprising means for encoding successive images of a video image sequence according to a predetermined coding scheme in which some images of the sequence are intra-coded, without reference to any other image of the sequence, and

CS
Contd

the remainder are respectively coded with reference to at least one further image of the sequence; means for formatting the encoded data for each image frame into one or a sequence of data blocks and outputting a data block stream formed of the data block or blocks from successive ones of the sequence of video images, said formatting including formatting at least one image of the sequence into a plurality of data blocks, said means for formatting being operable to identify intra-coded frames, and being configured to insert additional data blocks in said data block stream, each of said additional blocks carrying data identifying the relative location in the data block stream of the first or only data block of the closest previously formatted intra-coded image frame, wherein each of said additional data blocks are provided at fixed periodically repeated intervals within the stored sequence of encoded image data blocks .

12. (TWICE AMENDED) A video image player configured to receive and read the sequence of data blocks from a sequentially-readable storage device, said storage device capable of being sequential read and carrying an encoded and formatted sequence of video image, wherein some images of the sequence are intra-coded, without reference to any other image of the sequence, and the remainder are respectively coded with reference to at least one further image of the sequence, and the encoded data for the succession of image frames is formatted into a sequence of data blocks, with at least one data block per encoded image frame, with at least one image of the sequence formatted into a plurality of data blocks, with the stored sequence of data blocks including additional data blocks, with each such additional data block identifying the storage device storage location of the first or only data block of the closest previously formatted intra-coded image frame, said player comprising a decoder arranged to receive the stream of data blocks, decode the image data and output a sequence of video image frames, said player being

C8
Wm

operable to output selected ones of said sequence in a fast-forward or fast reverse mode, the player comprising means for selecting frames by selecting every N^{th} additional data block and displaying the respectively identified intra-coded image frame, wherein every N^{th} additional data block is provided at fixed periodically repeated intervals.

13. A method as claimed in claim 1, wherein at least one image of the sequence includes an intra-coded image frame.

14. A method as claimed in claim 1, wherein at least one image of the sequence includes a predicted image frame (P-frame).

15. A method as claimed in claim 1, wherein at least one image of the sequence includes an interpolated image frame (B-frame).

16. A device as claimed in claim 6, wherein at least one image of the sequence includes an intra-coded image frame.

17. A device as claimed in claim 6, wherein at least one image of the sequence includes a predicted image frame (P-frame).

18. A device as claimed in claim 6, wherein at least one image of the sequence includes an interpolated image frame (B-frame).